

**THE TAMIL NADU  
DR.M.G.R. MEDICAL UNIVERSITY  
CHENNAI**

**BENIGN BREAST DISEASES  
(NON INFLAMMATORY)  
AN ANALYTICAL STUDY**

**DISSERTATION SUBMITTED FOR  
M.S., (GENERAL SURGERY) DEGREE EXAMINATION  
MARCH – 2007**

# **CERTIFICATE**

This is to certify that the dissertation entitled **BENIGN BREAST DISEASES (NON INFLAMMATORY) AN ANALYTICAL STUDY** submitted by **Dr. S. Dinesh** to the faculty of surgeons, Tamilnadu Dr. MGR Medical University Chennai in partial fulfillment of the requirement for the award of M. S. Degree branch I (General Surgery) is a bonafide research work carried out by him under our direct supervision and guidance.

Professor and  
Head of the department  
of General Surgery  
Government Rajaji Hospital  
Madurai Medical College  
Madurai

IV Surgical Unit Chief  
Professor  
**Dr.M.N.Kamaludeen M.S.,FAIS,FICS.,**

## **DECLARATION**

This is consolidated report on “**BENIGN BREAST DISEASES (NON INFLAMMATORY) AN ANALYTICAL STUDY**” at Government Rajaji Hospital Madurai during the period August 2004 to August 2006.

This is submitted to the Tamilnadu Dr. M.G.R.Medical University, Chennai in partial fulfillment of the rules and regulations for the M.S. Degree Examination in General Surgery.

Government Rajaji Hospital  
Madurai Medical College  
Madurai.

**Dr. S. DINESH**

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## **INTRODUCTION**

Diseases of the breast had been subject of medical interest as long ago as 3000 B.C., even at the time of Egyptian civilization.

From that time onwards, man tried to attribute reasons to the development of breast diseases, but the mystery is still not well unfolded. Following the development and practice of human anatomy in the Middle Ages in Europe, many attempts were made to find out etiopathogenesis of breast diseases.

In the recent years enormous development has occurred in the field of Histo-pathology due to Electron microscope, in the field of endocrinology as hormone measurements, which helps in our understanding regarding the diseases of breast.

Until recently, benign diseases of breast were regarded as relatively unimportant, as major focus was on breast cancer and it also suffered from the disadvantage of hopelessly confusing terminology, inadequate classification and poor correlation between radiological, clinical and pathological process. But now there is increasing interest for these following reasons.

Firstly, patient demand investigation and treatment for symptoms of benign breast disease.

Secondly there is question of premalignant discords and histological features which may imply an increased risk of cancer, prove in whom regular surveillance may be beneficial.

Now the subject has become more complex and an integral approach involving surgeons, radiologists and pathologist is necessary.



<b>THE AIM OF STUDY</b>
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**A. DEMOGRAPHIC INCIDENCE AND RELATIONSHIP**

- I. Age
- II. Sex
- III. Geographic Distribution
- IV. Awareness
- V. Dietary Habits

**B. INCIDENCE OF VARIOUS LESION WITH RESPECT TO BREAST SEGMENTS**

- I. Site
- II. Side
- III. Size

**C. RELATIONSHIP OF VARIOUS LESION TO REPRODUCTIVE AGE GROUP IN FEMALE**

- I. Menarche
- II. Menstruation
- III. Pregnancy
- IV. Lactation
- V. Menopause

**D. TO CORRELATE THE CLINICAL DIAGNOSIS WITH  
HISTOPATHOLOGICAL DIAGNOSIS IN THE OPERATED CASES**

**E. The ratio of carcinoma of breast and BBD during the period of study and the  
Ratio of each lesion among Benign Breast Disease.**

## **METHODS AND MATERIAL OF STUDY**

- I. In the present study, data and records were collected from surgical wards at Govt. Rajaji Hospital from Aug 2004 to Aug 2006(over a period of two years) and breast clinical outpatient.
- II. In all cases of breast diseases who were taken of study, the age, sex and duration were carefully ascertained.
- III. The side and site of lesion and extent of disease were recorded.
- IV. In selected cases, FNAC was done preoperatively.
- V. Breast diseases which were diagnosed clinically as benign only is considered in the present study for discussion in detail. Cases from paediatric age group as well as inflammatory conditions (eg). Tuberculosis Breast had not been taken into account.

Xero mammography could not be done due to non-availability of facility. Clinical diagnosis was made and surgery done if the case warranted. All excised/operated specimen were submitted for histopathological examination.

The above said particulars were recorded in a prepared proforma as attached.

## **MICROSCOPIC ANATOMY:**

BREASTS are modified sweat glands in that they are embryologically derived from downward growth of ectoderm in to underlying mesenchyme.

Basically there is a system of major ducts arranged in a segmental and radial fashion. These lead to the secretory component of the breast- the terminal ductal- Lobular unit (TDLV). The breast is thus subdivided into lobes, though these are not defined precisely anatomically. The interlobar fascia is dense and fibrous where as the periductal and intralobular connective tissue is much more loose and vascular.

The ‘terminal ductile ’ of the terminal ductular unit has 2 components one lies outside the lobule and is known as extralobular terminal ductile (ETD), whereas the other lies with in the lobule-intralobular terminal ductile ( ITD ). The terminal ramifications of ITD form the secretory unit of the breast.

The term ‘terminalduct’ has been used for both the smallest epithelial unit in the lobule and the largest duct that opens onto the nipple surface.

Histologically that part of the duct system adjacent to the skin of the nipple is lined with stratified squamous epithelium. However there is a sudden change to a double layer of columnar or cuboidal epithelium which characterizes the remainder of the duct system. The terminal ductules (acini) can undergo secretory changes and thus have a role of both transport and secretion.

Between the epithelial cell layer and basement membrane is a network of myoepithelial cells. These respond to oxytocin and are responsible for milk ejection during lactation.

## **PHYSIOLOGICAL CHANGES IN BREAST:**

### **CHANGES DURING MENSTRUAL CYCLE**

Despite widespread anecdotal belief to the contrary, there is little evidence of substantial histological changes occurring in the breast through out the different phases of menstrual cycle. Retention of fluid may occur during the luteal phase menstrual cycle. Retention of fluid may occur during the luteal phase but this does not appear to be associated with morphological change.

### **CHANGES DURING PREGNANCY AND LACTATION**

The main histological change that occurs in the breast during pregnancy is lobular-alveolar growth and the development of new secretory units. This gives rise of the characteristic microscopic description of 'Adenosis of Pregnancy'. It is characterised histologically by alveolar dilatation and conversion of the resting two layer epithelium to a monolayer which demonstrates secretory changes within it. Cotostrum formation, capillary growth, venous engorgement and myoepithelial cell hypertrophy are also apparent as pregnancy progress. There is a doubling of breast weight from 200-400mg, much of which is due to fluid retention. These changes occur under influence of increased levels of luteal and placental sex harmones, placental lactogens and chorionic gonadotrophins.

Following cessation of feeding, there is gradual return to nonpregnant state. This process known as post lactational involution is characterized histologically by lymphocytic infiltration of lobules. There is no reduction in the number of ducts or lobules present.

## **CHANGES AT MENOPAUSE:**

Involutional changes occur from about the age of 35 with regression of glandular tissue and its replacement by fat and fibrosis. Before the age of 50, this process is characterized by loss of some lobular tissue. In older women, progression of this process results in the complete replacement of lobular tissue by collagen and fat.

The aberration of this involutional change may explain some of the benign disorders that occur in this age group.

## **CLASSIFICATION OF BENIGN BREAST DISEASE:**

There is no completely satisfactory classification of benign breast disease. Previous attempts have been based on number of factors as clinical symptoms, age of the patient, histological features or that part of the secretory system in which the abnormality has arisen. They all have inherent disadvantages. Firstly there is poor correlation between clinical, pathological and radiological features in any particular disease. Secondly benign breast disorders encompass a wide spectrum of clinicopathological features ranging from near normality to severe disease. Finally the breast must be regarded as a physiologically dynamic structure in which cyclical variations are superimposed on changes of development and involution throughout the women's life. These physiological changes themselves may be so extensive that they may fall outside what is regarded as the normal spectrum.

It has therefore been suggested that the broad concept of benign breast disease should be reconsidered. Many so called diseases of breast might now be regarded more actually as disorders that are based on aberrations of the process of development, cyclical change and involution (ANDI). This does not mean the benign breast disease does not occur, but that the term is reserved for disorders of such severity that they are frankly abnormal.

Aberration of normal development can account for many if not all benign disorder. A simplified system based on various stage of physiological change (development, cyclical change, pregnancy, lactation, involution) is seen in the table. Many patients with these condition require reassurance than specific treatment and explanation that they do not have a disease. This approach is well demonstrated in patients with cyclical mastalgia and modularity(fibrocystic disease). Majority of

premenopausal women experience a degree of breast discomfort and increasing nodularity prior to menstruation which is considered as normal physiological process.



<b>CLASSIFICATION OF PATHOGENESIS OF NON – MALIGNANT BREAST DISEASES ON THE CONCEPT OF ABERRATION OF NORMAL DEVELOPMENT AND INVOLUTION (ANDI)</b>			
<b>PHYSIOLOGICAL STATE OF THE BREAST</b>	<b>NORMAL</b>	<b>BENIGN DISORDER</b>	<b>BENIGN DISEASE</b>
DEVELOPEMENT	Duct Development  Lobular Development  Stromal Development	Nipple Inversion  Fibroadenoma  Adolescent Hypertrophy	Mammary Fistula  Giant Fibroadenoma
Cyclical Change	Harmonal activity  Epithelial activity	Mastalgia and Nodularity  Benign Papilloma	_____
Pregnancy and Lactation	Epithelial Hyperplasia  Lactation	Blood Stained Discharge  Galactocele	_____
Involution	Ductal involution  Lobular Involution  Involution Epithelial Hyperplasia	Duct Ectasia, Nipple retraction  Cysts, Sclerosing adenosis  HyperPlasia & Micropapillomatosis	Periductal mastitis with Suppuration  Lobular and ductal hyperplasia with atypia

## **PATHOGENESIS & PATHOLOGY:**

### **I. FIBROCYSTIC DISEASE OF THE BREAST or MAMMARY DYSPLASIA or ANDI (Aberrations of Normal Development and Involution).**

It is notoriously a pleomorphic disorder in which variable morphologic patterns are encountered in different patients, in different areas of the same lesion or even in different microscopic fields of one slide. However it is possible to distinguish three dominant patterns of microscopic change.

1. cystic formation and fibrosis
2. epithelial hyperplasia (ductal and lobular)
3. sclerosing adenosis.

It is difficult to express an incidence of this condition in the general adult female population because of the selective criteria used for the diagnosis and because of the selective nature of the material studied. Haagensen estimates that atleast 10% of women develop clinically apparant cystic disease. The condition is unusual before adolescence, is diagnosed frequently between the ages 20 and 40, peaks at or just before the menopause and rarely develops after the menopause.

Hormonal imbalances are considered to be basic to the development of this multipatterned disorder. The excess of estrogens may represent an absolute increase. There is some evidence of abnormal end metabolism some evidence of abnormal end organ metabolism of harmones in the pathogenesis of cystic disease. Oral contraceptive use decreases the risk of fibrocystic disease as it supplies a balanced source of progesterone and estrogen.

For cyclical mastalgia, in addition to hormonal imbalance (ie) hyperestrogenism, other attributed causes are abnormal prolactin secretion. Though both random and basal levels of prolactin are normal in females with cyclical mastalgia, there is some evidence of impaired hypothalamic control of the release of this hormone in patients with severe symptoms.

Despite widespread belief that breast pain is due to water retention, this has never been proved.

## **OTHER FACTORS:**

Excessive caffeine ingestion, inadequate essential fatty acid intake has been suggested. The latter is of interest as there is good evidence fatty acid supplements can reduce the symptoms of cyclical mastalgia. The actual mechanism is unclear but may relate to a resulting deficiency of prolactin and subsequent enhanced effect of prolactin on the breast.

Psychoneurosis is widely incriminated as an important factor. However there is no evidence of excessive anxiety, depression or phobia in these patients when they are evaluated against controls.

Macroscopically, the affected areas of sectioned breast are white or yellow and of rubbery consistency.

## **I. CYSTS AND FIBROSIS:**

They are variable in size from 1cm to 5 cm unopened, these cysts are brown to blue (blue-domercysts), owing to the contained semi translucent, turbid fluid. The epithelium is cuboidal or columnar. Apocrine metaplasia may be seen which is virtually benign. Epithelial overgrowth and papillary projections are common. The stroma around it is usually the compressed fibrous tissue.



**Excised Specimen Of Fibrocystic Disease**

## **II. EPITHELIAL HYPERPLASIA:**

Of epithelium lining the ducts and acini may occur with or without atypia. It is this pattern of alteration that should concern the pathologist who is called to differentiate a typical but still non cancerous hyperplasia, carcinoma and benign hyperplasia.

There is increase in the layer of duct lining epithelium beyond the usual double layer. It takes the form of solid masses in to the lumen or papillary proliferations into the lumen.

Atypical lobular hyperplasia (ie) hyperplasias of terminal duct and ductules (acini) may be seen. However they donot fill or distend more than 50% of terminal duct units.

## **III. SCLEROSING ADENOSIS:**

It is characterized histologically by intralobular fibrosis and proliferation of small ductules or acini. It may have cartilaginous consistency as like cancer. Proliferation of small ducts, canaliculi and gland buds occur. Lobular arrangement is maintained. To the inexperienced, the histologic differentiation of a florid case of sclerosing adenosis from frank cancer may be difficult.

Relative risk for invasive breast carcinoma based on pathological examination of benign breast tissue (American college of pathologist's consensus statement)

## **I. NO INCREASED RISK:**

- \* Adenosis, Sclerosing or florid
- \* Apocrine metaplasia
- \* Cysts macro and micro
- \* Duct ectasia
- \* Fibro adenoma
- \* Fibrosis
- \* Hyperplasia (mild 2-4 cells indepth)
- \* Mastitis (inflammation)
- \* periductal mastitis
- \* Squamous metaplasia

## **II. SLIGHTLY INGREASED RISK (1.5-2 TIMES)**

### **Hyperplasia:**

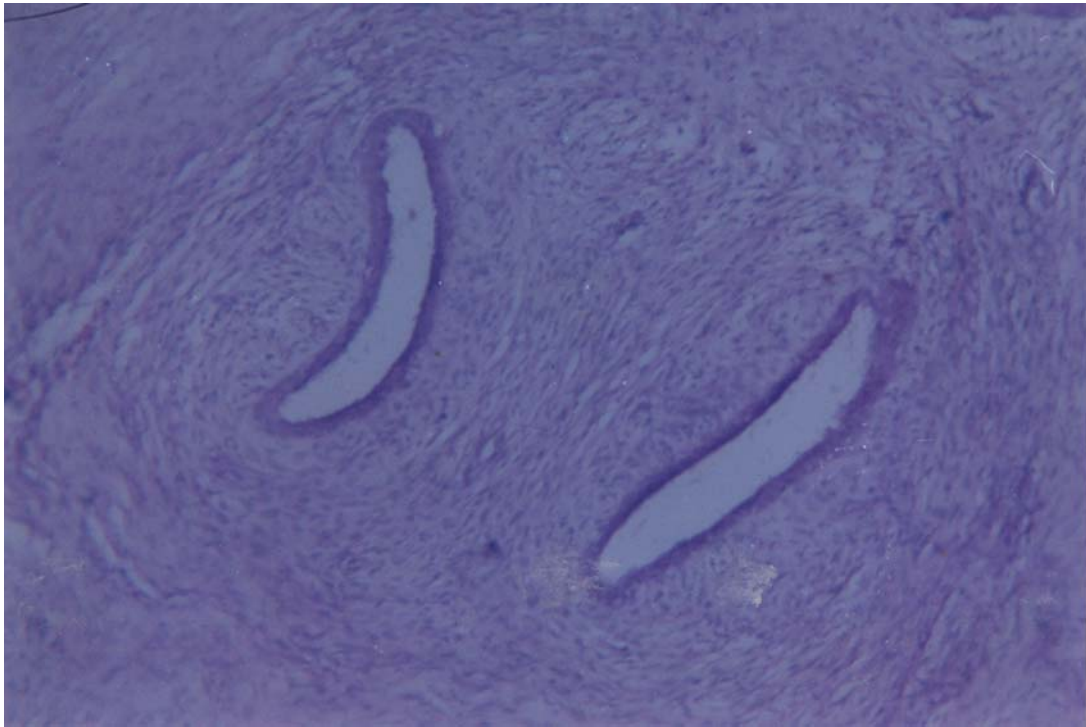
Moderate or florid; solid or papillary  
Papilloma with a fibrovascular core.

## **III. MODERATELY INCREASED RISK (5 TIMES)**

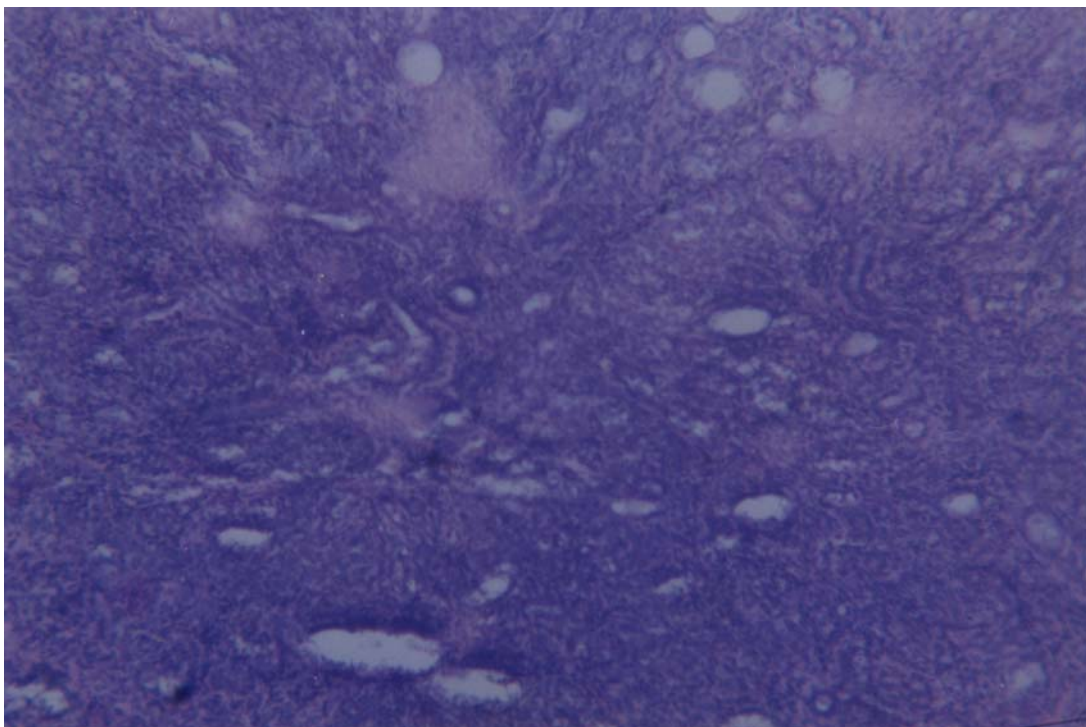
Atypical hyperplasia (ductal or lobular)

## **IV. INSUFFICIENT DATA TO ASIGN A RISK**

Solitary papilloma of lactiferous sinus; Radial scar lesion.



**Fibroadenoma Breast : ( H &E, X100)**



**Fibrocystic Disease of Breast: (H &E, X 100)**

Photograph shows on low power view multiple lobules containing cystically dilated spaces and glandular proliferation typical of fibrocystic disease of breast.



## **FIBRO ADENOMA:**

It is a new growth composed of both fibrous and glandular tissue.

Common before the age 30. May at times associated with fibrocystic disease. Giant fibroadenoma has bimodal age of presentation at the extremes of life.

They grow as a spherical nodule that is sharply circumscribed and freely movable from the surrounding breast substance. They are frequent in upper outer quadrant of the breast. Vary in size from 1cm – 5 cm. When they are more than 5cm, it is called Giant fibroadenoma. Most are between 2-4cm in diameter.

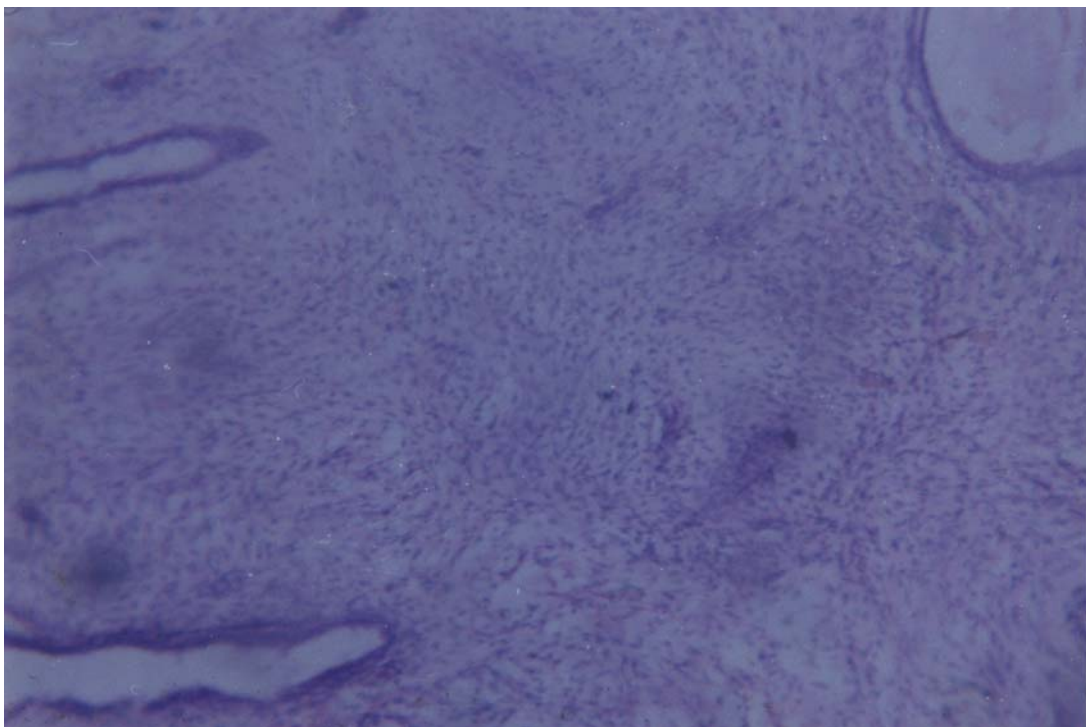
## **HISTOLOGICALLY:**

### **Pericanalicular type:**

Cellular fibroblastic stroma enclosing glandular and cystic spaces lined by epithelium. Intact round or oval gland spaces may be present lined by single or multiple layers of cells.

### **Intracanalicular Type:**

There is compression of gland spaces due to active proliferation of connective tissue stroma. Gland lumen are collapsed into slit like irregular clefts.



**Bengin Cystosarcoma Phyllodes : (H & E, X 100)**

The typical stromal nodule projecting into a cyst, giving a gross phyllode(leaf-like) pattern can be seen. The lesion resembles fibroadenoma but with increased cellularity and mitotic figures.

But both type may co exist.

They have low cellularity and regular cytology.

Giant fibroadenoma contain the typical hypocellular stromal and epithelial components showing varying through usually mild degrees of hyperplasia and atypia. Mitosis uncommon. Such features are different from phyllodes tumour which generally exhibit much more cellularity and pleomorphism. However there is some overlap of microscopic appearance between these two conditions.

Fibroadenoma rarely turns into fibrosarcoma or lobular carcinoma.

Recurrence after removal may be due to undiagnosed cystosarcoma; missed at previous surgery; metachronous development.

## **PHYLLODES TUMOUR:**

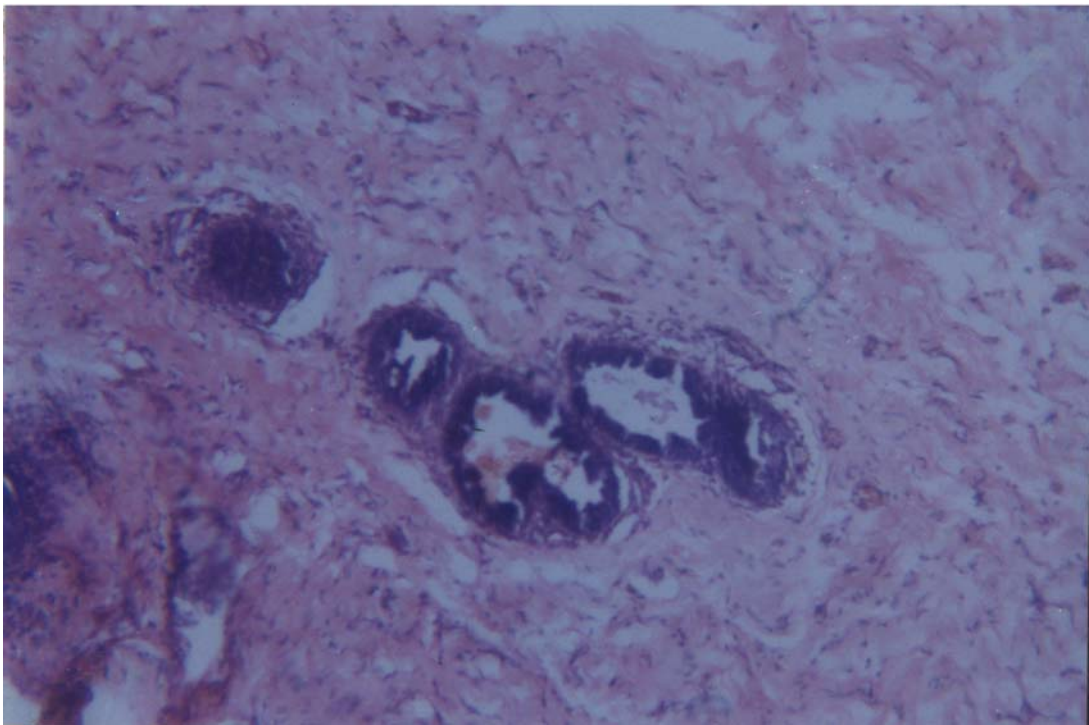
They are also known as cystosarcoma phyllodes which is a misnomer as it contains both epithelial and mesenchymal. Also called serocystic disease of Brodie. It has both benign and malignant variety. They have also been equated with Giant fibroadenoma but it is also misleading as it underestimates the malignant potential of the tumour. Some times it metastasize too. Usually occur in the woman over the age of 40. they present as a large, often massive with an unusually bosselated surface. Occasionally ulceration of the overlying skin occurs due to pressure necrosis. They remain mobile on the chestwall. The cutsurface is soft brown in colour and may exhibit cysts, haemorrhage and necrosis. Histologically both fibrous and epithelial elements are present with the stroma showing hypercellularity 'atypia' and numerous mitosis.



Clinical Photograph of a patient, 26 Years female with benign phyllodes tumor right breast.



Lateral of the tumor in the same patient show in dilated venis



**Gynaecomastia: (H&E, X 100)**

## **INTRADUCTAL PAPILLOMA:**

There is neoplastic papillary proliferation within the duct. Often solitary and found within the principal lactiferous ducts or sinuses. Present as :

- i. Nipple retraction
- ii. Appearance of serous or bloody discharge
- iii. Presence of small sub areolar tumour

Usually they are very small (1cm in diameter), difficult to locate clinically. Histologically it is composed of multiple papillae. The distinction between benign and typical intraductal papilloma and intraductal papillary carcinoma is difficult.

## **GALACTOCELE:**

Rare, represents a cystic dilation of a duct occurring during lactation. Often multiple ducts are involved. During acute phase the palpable nodules are tender and contain a milky fluid enclosed within this dilated wall. Its walls may calcify.

## **GYNAECOMASTIA:**

Gland lobules are not found in the normal male breast. As in the female, male breast is subject to hormonal influences, but it is considerably less sensitive than female. It may occur in response to excess of estrogen.



Clinical Photograph of a patient 24 years Male with Bilateral  
Gynaecomastia



## **ETIOLOGY:**

### **I. Idiopathic**

- May be unilateral or bilateral
- enlarge at puberty.

### **II. Associated with Leprosy**

Because of bilateral testicular atrophy

### **III. Associated with liver failure**

In cirrhotic patients due to failure of liver to metabolise estrogens.

In klinefelter's disease

### **IV. Hormonal:**

- Function testicular neoplasms as leydig cell tumour, Stilbosterol therapy for prostate cancer
- Tertoma of the testis
- In Anorchism
- After Castration

- In ectopic Hormonal production of bronchial carcinoma.

## **V. Associated With Drugs:**

Cimetidine

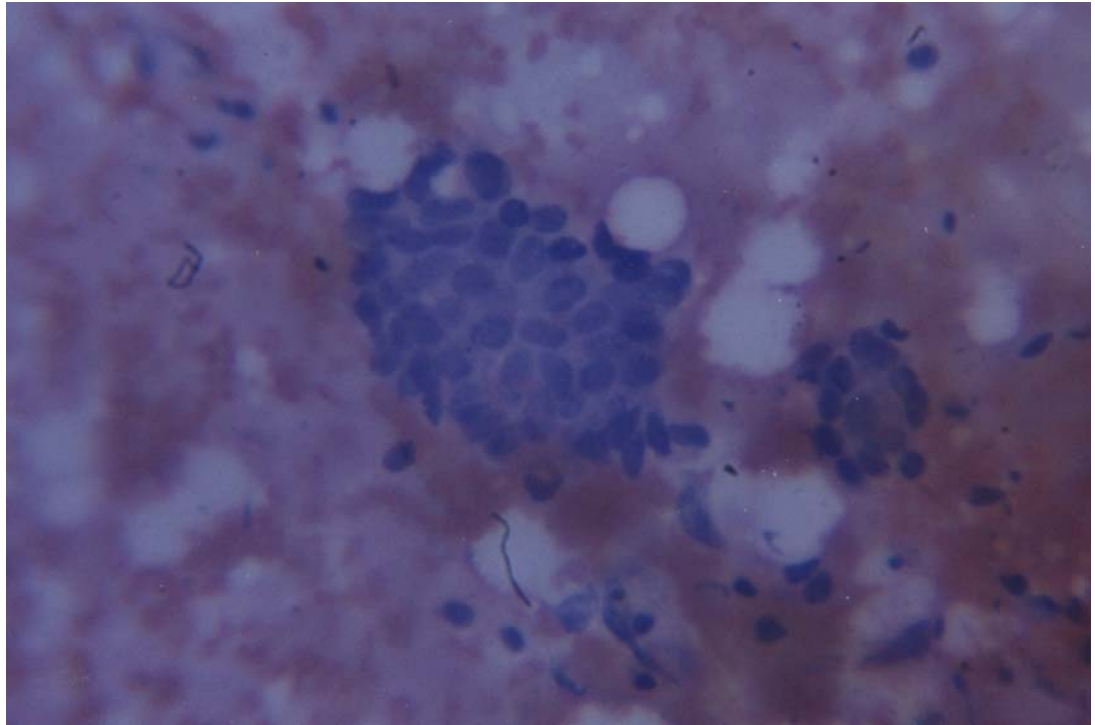
Digitalis

Spiranolactone

Chronic marijuana smokers

Heroin addicts

Button like, Sunareloar enlarge develops. It may stimulate the adolescent female breast. Macroscopically there is proliferation of a dense periductal hyaline, collagenous connective tissue, but more striking are the change in the epithelium of the ducts. There is marked hyperplasia of the ductal linings anaplasia is absent.



**Fibroadenoma – FANAC (H&E, x 450)**

Photograph shows a tight cluster of epithelial cells, the nuclei of which are monomorphic and normochromatic. A few bare nuclei are also seen in the haemorrhagic background.

## **DIAGNOSTIC BASIC OF BENIGN BREAST CONDITION FNAC:**

It is an easy outpatient procedure, and it helps to differentiate benign lesion from that of malignant lesion. It is of low cost. By this procedure benign disease can be differentiated from malignant disease with up to 98.6% accuracy. It differentiates solid from cystic lesions. Can be done with 22 gauge needle, an appropriate syringe and a fixative either physiologically buffered saline or 95% ethyl alcohol.

### **Cytological differentiations are as follows:**

<b>Benign Cells</b>	<b>Malignant Cells</b>
1. Normal Cell Size	Increased Cell Size
2. Good Cell Adhesion to one another	Loss of adhesion
3. Uniformity of Cells	pleomorphism
4. Coarse but regular Nuclear Chromatin	Fine polar nuclear chromatin often with prominent nuclei
5. Cellularity is low	Cellularity is high
6. Frequent stripped nuclei	Lack of stripped nuclei Lymphocytic response

FNAC reveals no fat cells in benign lesion because fat does not form part of benign lesion. Adipose tissue is present in all cases of malignant lesion which penetrates the fat.

## **MAMMOGRAPHY:**

Mainly to detect malignancy

### **In malignancy:**

- \* Fine calcification < 0.5 Cm in Size
- \* Dense lesion as masses, architectural distortion, asymmetries.
- \* Both calcification and density abnormalities.

## **ULTRA SOUND BREAST:**

To detect solid and cystic lesions

In immature fibroadenoma, posterior echoes are accentuated while in fibroadenoma with hyalinosis, the posterior echoes are attenuated. In breast cancer also, in circumscribed carcinoma posterior echoes are accentuated and in stellate carcinoma which is rich in fibre, posterior echoes are attenuated. color doppler helps to detect cancer by its increased vascularity. To differentiate benign tumours and cancer. it's by shape and margin of the mass; depth and width ratio; feature of connective tissue and adjacent structures.

## **TREATMENT:**

They present with pain or lump in breast or both. Aim of treatment is to exclude cancer and if excluded treatment of symptoms either medically or surgically.

### **1. CYCLICAL MASTALGIA:**

More than 80% of these patients require no treatment other than reassurance, particularly that such symptoms do not imply any form of neoplastic process. About 5 - 10% of patients with cyclical mastalgia experience pain despite reassurance. For those patients specific drug therapy considered. The drugs listed are tried. However no drug satisfies the criteria of being universally effective, free of side effects. Reduction in caffeine intake or administration of vit A or Vit B6 have failed to show any effect on cyclical mastalgia.

Patients should be initially treated with evening primrose oil followed by Danazol for patients refractory to treatment. Bromocriptine is a third choice with activity similar to that of evening primrose oil. Tamoxifen has the drawback that it is not strictly registered for use in benign disease.

Responses to treatment are relatively short lived usually of the order of six months. It is therefore treat them for six months, then to see whether relapse occurs on cessation perhaps at a lower dose than originally used or for change in therapy if the initial response has been poor. Treatment is particularly difficult in young females, in whom mastalgia is often resistant to treatment whose potential for breast pain may span several decades and whose fertility must be considered. Bromocriptine

And Danazol are potentially teratogenic and require **the barrier form of** contraception as they interfere with oral contraceptives. Many younger women also dislike the amenorrhoea induced by Tamoxifen and Danazol.

If medical treatment fails subcutaneous mastectomy may be considered, but it should be avoided if at all possible.

## DRUGS USED IN TREATMENT OF CYCLICAL MASTALGIA

Class of Agent	Mode of Action	Drug Dosage	Side Effects
Diuretic	Reduction of Body Water	Diazide diuretics Daily	Metabolic disorder
Progestins	Correction of Luteal abnormality	Medroxy Progesterone Acetate 20mg Daily	Premenstrual symptoms weight gain
Antiestrogen :90%	Correction of Hyper Estrogenism	Tamoxifen 10 – 20 mg Daily	Hot flash & Weight Gain
Dopamine agonist :50 %	Correction of Hyperlactinemia	Bromocriptine 2.5mg bd	Nausea, Dizziness; Headaches; postural hypotension
Antigonadotrophin :70%	Suppression of FSH and LH	Danazol 200 – 400 mg Daily	Weight Gain; acne; amenorrhoea; hirsutism; voice change
Essential Fatty Acid:45%	Correction of EFA Deficiency	Evening Primrose oil 6 Capsules daily	Nausea





**Excised specimen of Fibroadenoma**

## **II. NON CYCLICAL MASTALGIA:**

- \* Exclude musculo skeletal pain
- \* Management of non - cyclical mastagia is unsatisfactory

Many principle relate to the treatment of cyclical mastagia may be applied to non-cyclical breast pain. However overall response to various drug threapy is only about 50%.

## **III. FIBROADDENOMA:**

Upto the age of 25, a clinical diagnosis suffices. Thereafter pathological examination is required, because of the need to exclude carcinoma, which is done by FNAC examination.

The practice of surgically removing all fibroadenomas has nowbeen condemned, because of the greater understanding of this condition. If fibroadenomas are left untreated, most will slowly increase in size 1-3 Cm in diameter over a period upto 5 years. The active growth phase is about 6-7 months, during which time there is doubling of size. Thereafter size may remain static or in one third of patients, gradually become smaller. In women under the age of 25, routine removal is unnecessary Excision can be done. if associated with suspicious cytology on FNAC, or if they become large or if the patient expressing desires the lump to be removed.



**Clinical photograph of 40 years with giant fibroadenoma of right breast**



**Lateral view of the tumor of the same patient**

Removal of fibroadenomas is generally recommended after the age of 25. For Giant fibroadenoma Enucleation / Excision recommended. While this treatment initially results in discrepancy in breast size, the remaining breast tissue expands to virtual normal within a year or two. Wide excision or Mastectomy is not indicated.

#### **IV. PHYLLODES TUMOUR:**

Tumour if occur in young female under the age of 2 are said to represent the benign end of spectrum. Simple enucleation / Excision with 1Cm Margin of normal tissue recommended.

For older patients, wide excision with 1cm margin of normal tissue or simple mastectomy if tumour are larger is advised.

#### **V. DUCT PAPILLOMA:**

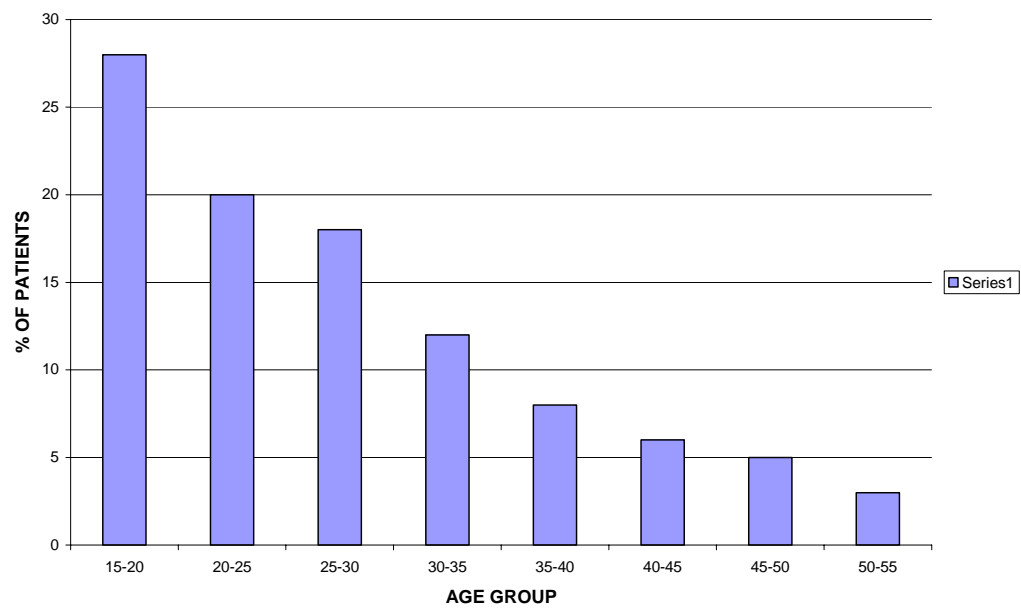
Micro ductectomy advised where duct is excised to produce a mass of breast tissue 2.5cm in diameter.

#### **GYNAECOMASTIA:**

If it is secondary to some other disease that is treated. if idiopathic variety - Reassure the Patient.

- If patient still wants - Webster's operation done where enlarged breast tissue is removed with preservation of nipple and areola.

### AGE GROUP WISE PRESENTATION OF BENIGN BREAST DISEASE



## **RESULT OF STUDY**

### **A. DEMOGRAPHIC INCIDENCE AND RELATIONSHIP:**

#### **1. Age Incidence**

The lowest age incidence of benign breast disease was found in a girl with 1 year of age. In our study group. Peak incidence of benign breast tissue happened to occur between 15 - 30 years. The incidence gradually diminishes with advancement of age. Only 2 cases were reported in 6th decade and the highest in our series was the 55 Year old lady with cystosarcoma. It is depicted in the Histogram.

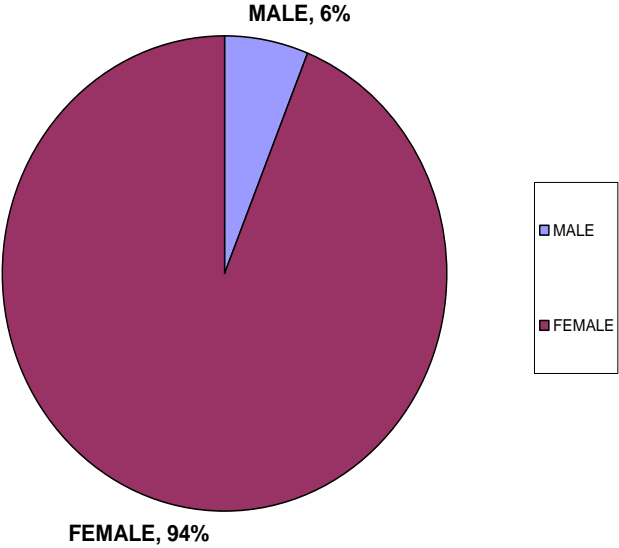
#### **Inference:**

Benign breast disease is common in early reproductive age (ie) Between 15-30 years.

#### **2. SEX**

It is more prevalent in female population out of 93 cases, only 5 cases were males. They form 6% only.

**SEX RATIO IN BENIGN BREAST DISEASE**



**Inference:**

Female benign breast disease greatly out numbers male breast disease.

**3. AWARENESS:**

Most of these patients had no schooling or only had primary school education. However 66% of cases sought medical advice within 6 month of disease. This may be attributed to the role of mass media (eg) Radio and television where breast screening is taught by self examination to exclude cancer. Pain in breast also made them to seek the medical health.

**Inference:**

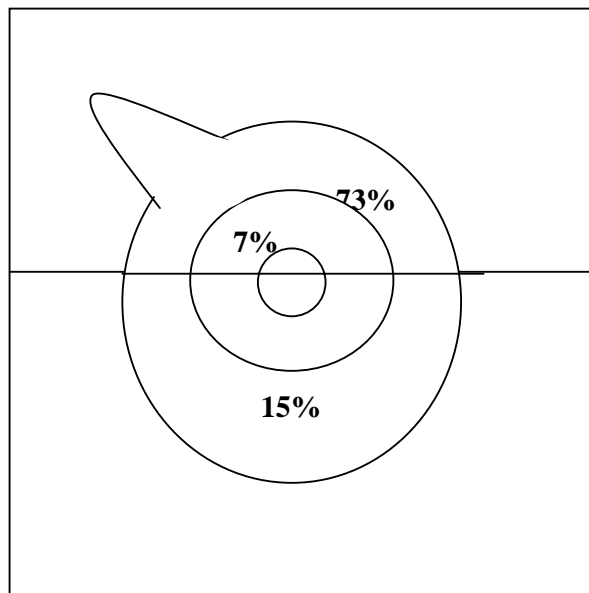
Health consciousness is good in general population, irrespective of their education. Pain and fear of malignancy made them to report earlier.

**4. RURAL/URBAN RATIO:**

Most of the urban people present their problems to sophisticated private hospitals. Government Hospitals is mainly attended by rural people. So, Rural/Urban ratio could not be ascertained in this present study.



**INCIDENCE OF BENIGN BREAST DISEASE WITH RESPECT  
TO BREAST SEGMENTS**



**UPPER QUADRANT – 73%**

**LOWER QUADRANT – 15%**

**ALL QUADRANTS - 05%**

**BENEATH NIPPLE - 07%**

## **5. DIETARY HABITS:**

Most of the patients in the present study belonged to lower and lower middle socioeconomic and they were having mixed dietary habits.

By the studies conducted in west, the inferences drawn were

- i) Diets rich in essential fatty acid reduced the mastalgia associated with Fibrocystic disease.
- ii) It was once said that caffeine containing confectionaries like chocolate, Coco, Coffee aggravates the mastalgia of Fibrocystic disease, has now been disproved as reduction in caffeine intake have failed to show any effect on relief of breast pain.

In the present study, the role of essential fatty acids could not be made.

## **Inference:**

This part needs further study and valuation.

## **B. INCIDENCE OF VARIOUS LESION WITH RESPECT TO DIFFERENT BREAST SEGMENTS**

**DISTRIBUTION ACCORDING TO BREAST SEGMENT:**  
**( TOTAL CASES STUDIED - 93 )**

**SITE:**

**UPPER QUADRENT: 73%**

Both Upper Quadrent - 19%

Upper Outer Quadrent - 38%

Upper Inner Quadrent - 16%

**LOWER QUADRENT: 15%**

Both Upper Quadrent - 4%

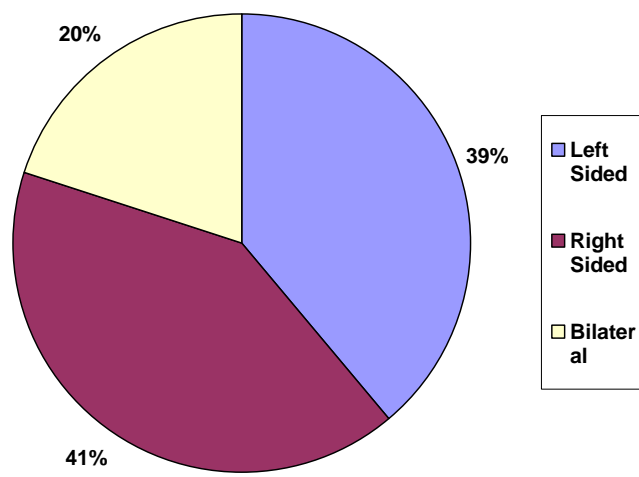
Upper Outer Quadrent - 6%

Upper Inner Quadrent - 5%

**BENEATH NIPPLE: 7%**

**ALL QUADRANTS: 5%**

**SIDE DISTRIBUTION OF BBD**



**SIDE:**

Bilateral breast lesion	- 20%
Right Sided Lesion	- 41%
Left Sided Lesion	- 39%

**SIZE:**

Less than 2Cms	- 14%
2 - 5 Cms	- 67%
More Than 5Cms	- 19%

**Inference:**

Benign breast disease is more common in upper quadrant. Unilateral lesion is more common and in upper quadrant. Unilateral lesion is more common and is around 80%. Among the lumps average size of presentation is 3 - 4 Cm.

**C. RELATIONSHIP OF VARIOUS BENIGN LESION TO REPRODUCTIVE AGE GROUP IN WOMEN:**

Benign breast disease especially fibrocystic disease are disorder or development due to cyclical change or involution and they are rightly called Aberration in normal development and involution.

### **1. MENARCHE:**

In the present study group 59% attained menarche by the age of 13 to 14 years which is consistent with the statistics in general population.

### **2. REGULARITY IN CYCLE:**

In fibroadenoma, menstrual cycles were regular. Menstrual irregularities were noted in 12% of cases of fibrocystic disease and pain related to periods were present in 25% of Cases.

### **3. PREGNANCY:**

35% of patients of present study group were unmarried.

25% of patients through married, had no children.

### **4. LACTATION:**

All patients who had children breast fed their babies for a variable period, most upto 2 years. inflammatory conditions of breast were not included in this study. 1 Case of Galactocoele was diagnosed clinically in her early twenties who had recent history of breast feeding.

## **5. MENOPAUSE:**

Only 3% patients attained menopause. So benign breast disease are less common among the perimenopausal are group. Out of 4 patients, 2 belong to phyllodes tumour and 2 belong to Fibrocystic disease of the breast.

## **Inference:**

Benign lesion as phyllodes tumour were common in perimenopausal women.

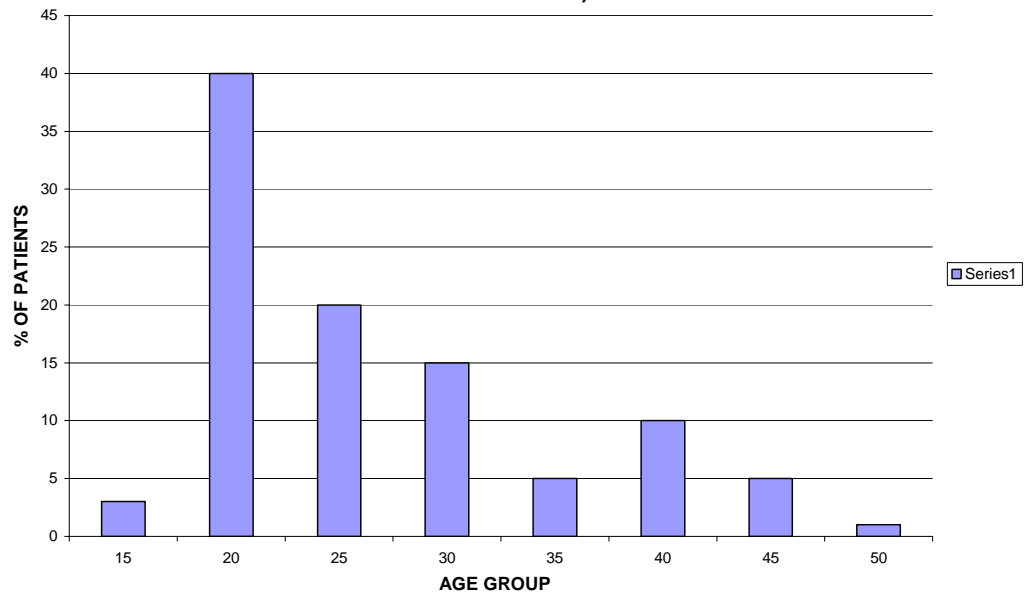
## **D. CORRELATION OF CLINICAL DIAGNOSIS WITH HISTOPATHOLOGICAL EXAMINATION:**

In the present study group, FNAC was done in selected cases especially fibrocystic disease of breast to confirm the benign nature of lesion. In all operated cases, the operated specimens were submitted for Histopathological examination. When comparing histopathological report with clinical diagnosis inferences made were.

\* Many cases of fibrocystic disease were clinically diagnosed as Fibroadenoma of breast.

\* Both fibroadenoma and fibrocystic disease can coexist in same lesion.

**AGE GROUP WISE PRESENTATION OF FIBROADENOMA (TOTAL NO OF CASES  
48/54% OF BBD)**





## 6. RATIO OF INDIVIDUAL LESIONS AMONG BBD:

Total number of cases of BBD - 93

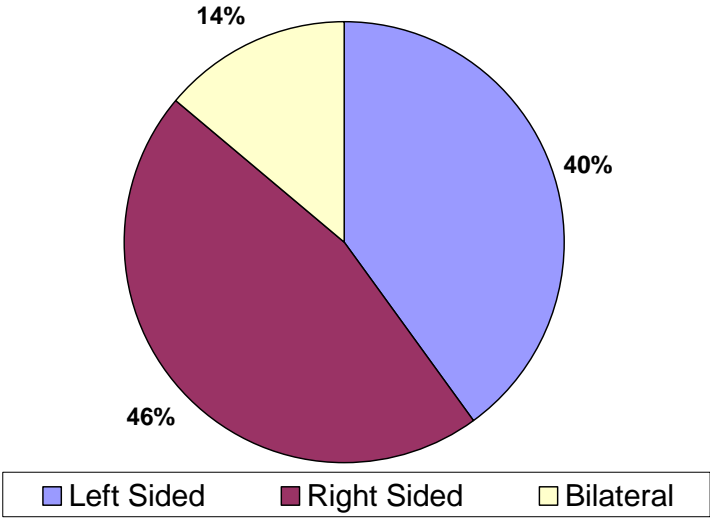
Total Number of Cases of Carcinoma

breast during the same period - 56

**BBD : CARCINOMA = 1.7:1**

Among BBD	No of Cases	In Percentage
Fibroadenoma	48	54
Fibroadenosis	34	37
Gynaecomastia	5	6
Phyllodes Tumour Lipoma	2	3
Lipoma	1	<1
Sclerosing Adenosis	1	
Duct Papilloma	1	
Galactocele	1	

SIDE DISTRIBUTION OF FIBROADENOMA



## **DISCUSSION OF INDIVIDUAL LESION MET IN THIS PRESENT STUDY:**

### **FIBROADENOMA:**

Total number of cases - 48 (ie) 54% of BBD

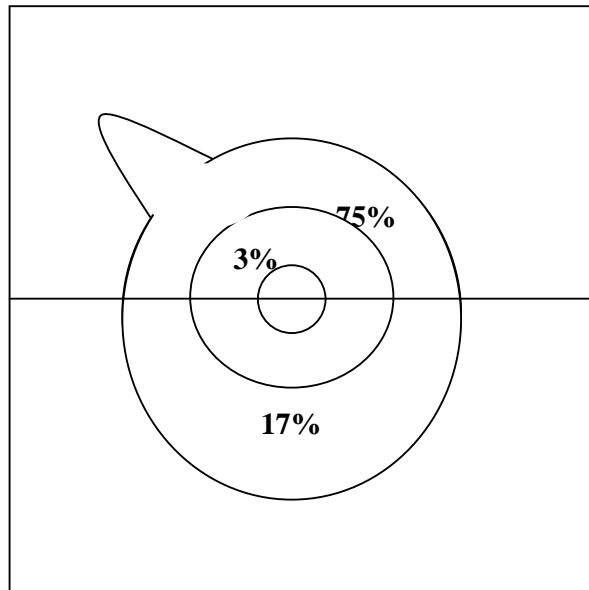
\* Fibroadenoma is the most commonest of BBD. In the present study commonly affected female population was between 15 - 30 years, with peak incidence at second decade. In much contrast to Haagensen series where women less than 25 Years of age constituted 25% of all fibroadenoma, in this study female less than 25 years constitute 63%. age group wise presentation is plotted herewith in Histogram.

\* Juvenile Fibroadenoma are those found in adolescent girls between ages of 12 to 16 years. in our study, we met 3 cases, constituting 3.5% of total cases of Fibroadenoma.

- \* Lowest age of presentation was 15 years in the present study.
- \* Side & site distribution of Fibroadenoma breast has been depicted in figures.
- \* Size of the tumour varied between 2 -4 Cms in 65% of cases in solitary tumours.

There were 17 cases of Giant Fibroadenoma in our study constituting 8.5% of total cases of Fibroadenoma.

**INCIDENCE OF FIBROADENOMA WITH RESPECT TO  
BREAST SEGMENTS**



**UPPERQUADRANT– 75%**  
**LOWER QUADRANT – 17%**  
**ALLQUADRANTS - 05%**  
**BENEATH NIPPLE - 03%**

Regarding bilateral Fibroadenoma present study shows 14% which is similar to Haagensen series which showed it in 15% of cases.

Multiple fibroadenoma are seen in single side or in both breast in 5 cases constituting 9.5% of total cases of fibroadenoma.

Recurrent fibroadenoma are seen in 2 cases, constituting 4.5% of total cases of fibroadenoma, recurrence was seen between 1-2 years of excision.

Their clinical presentation was almost all cases presents with lump breast. Associated with pain was 44% of cases. Pain associated with menstrual cycle was in 12% of cases.

None of these patients belonged to post menopausal age group 50% of our patients were unmarried and those married in 60% of cases the marriage age was above 18 Years. Their cycles were regular.

Treatment was surgical, it was excised in 88% of cases and enucleated in 12% of cases. Operated specimen was submitted for biopsy and few cases were proved to be fibrocystic disease.

## **FIBROCYSTIC DISEASE OF THE BREAST/ MAMMARY DYSPLASIA OR ANDI (ABBERATION OF NORMAL DEVELOPMENT AND INVOLUTION)**

Total number of cases met in our study was 34 which constitute 37% of BBD which is similar to other studies (They show 40%). Most of these cases were treated as out patients. It was common in iii decade: 20 to 35 years. Age group wise presentation is plotted in Histogram.

Bilateral disease is more common in Fibrocystic disease than any other BBD. Right side affected in 34%. Left side affected in 31% and both sides involved in 35% of cases.

Like fibroadenoma, upper quadrant of breast more affected than other quarants (71%) : side and site distribution were depicted in figures.

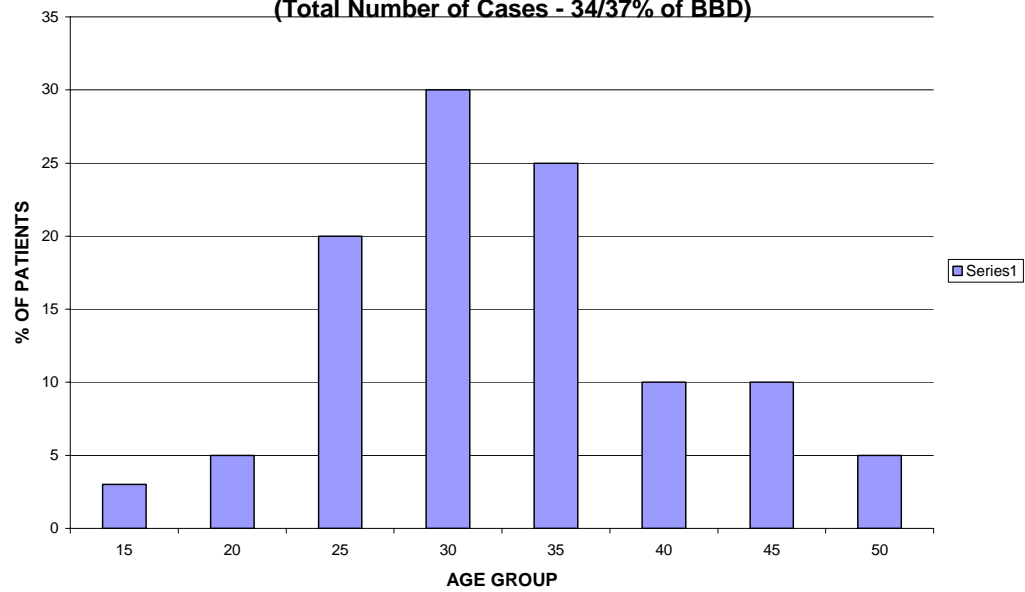
83% of these patients were married and their clinical presentation were nodularity and breast pain & pain related to period was in 25 % of cases and Menstrual irregularity was present in 12% of cases.

Associated systemic disorders were disorder were high with fibrocystic disease than any other BBD and was seen in 12% of cases. Diseases met were Asthma, Diabetes, TB etc.

In most of these patients FNAC was done to exclude malignancy and to confirm the benign nature of the lesion.

## AGE GROUP WISE PRESENTATION OF FIBROADENOSIS

(Total Number of Cases - 34/37% of BBD)

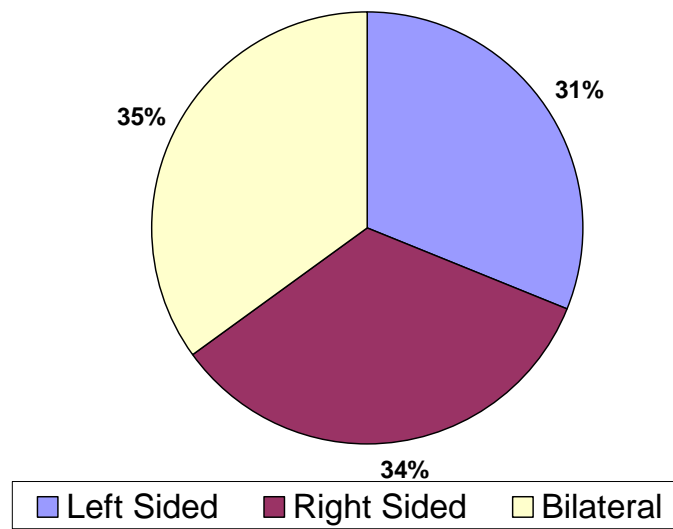


They were started NSAIDs initially and if they do not respond, Danazol - 50 mg BD given. In few cases Tamoxifen given. if Treatment fails after 6 months of therapy they were submitted for surgical excision.

Recurrence after surgery within a year was seen in 2 Cases. Patients response was better with Danazol than reassurance and Analgesics.



### SIDE DISTRIBUTION OF FIBROADENOSIS



## **PHYLLODES TUMOUR (Benign Variety):**

Number of cases met in our study was 2, constituting 3% of BBD. It is the large of all breast lumps, maximum size met in our study was 25 to 30 Cms. Increase in incidence seen from 4th decade onwards. All of them were in perimenopausal and postmenopausal.

They Presented with Cystic to firm mass, skin ulcers due to presence necrosis was seen in 1 Case, discharge and infection. After confirming the benign nature of lesion, wide excision was done in 1 Case and simply mastectomy was done in another case.

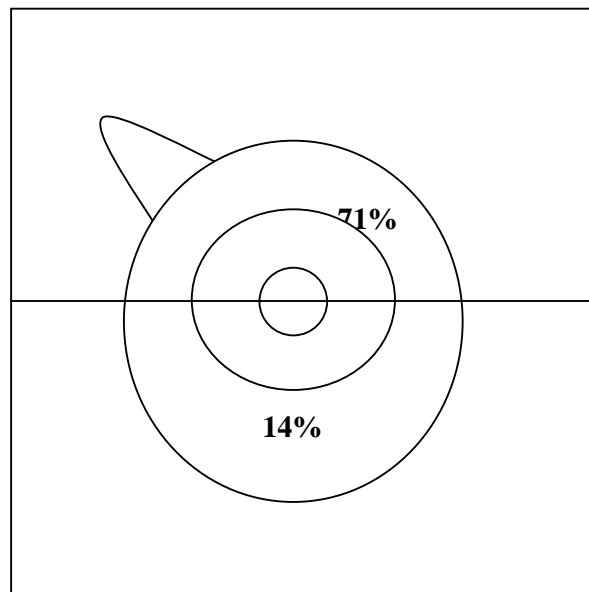
## **GYNAECOMASTIA:**

Total number of cases studied 5 which constitutes 6% of cases of BBD.

Those patients admitted in surgical wards for treatment of Gynaecomastia were taken for study and hence almost all of them belong to idiopathic group, whom the cause of the enlargement unknown. All of them were between the age of 15 to 25 Years.

Regarding the side right was affected in 35%, Left side in 30% and both breast affected in 35% of cases. Their clinical presentation was only swelling. Their secondary sexual character and genitalia were normal. Webster's operation was done for them and the species were submitted for Histopathological analysis.

**INCIDENCE OF FIBROADENOSIS WITH RESPECT TO  
BREAST SEGMENTS**



Upper Quadrant – 71%

Lower Quadrant – 14%

All Quadrants – 15%

## **DUCTPAPILLOMA:**

- We met only one Case
- She was a 35 years old lady whose clinical presentaion was pain and Serosanguinous discharge for whom Ductectomy was done.

## **SCLERASING ADENOSIS:**

Met in Only one case. it can be included under fibrocystic diseases. She was in her 5th decade, Clinically diagnosed as fibroadenoma and the mass was excised and it came as a Histological Surprice.

## **GALACTOCELE:**

Only one case in the present study in a 25 year female who was lacting 6 month back, presented as cystic mass in right breast, Aspiration done and the diagnosis confirmed.

## **LIPOMA:**

Seen in one case in 27 years female. it was excised and Histopathologically Confirmed.

Histological proliferation of fat cells evident away from the T.D.L.V. (Terminal Ductal Unit) Which were not disorder. Fat cells were diagnosed by cytoplasmic fat droplet (Inclusion Bodies) and eccentric position of cellular nuclei.

## **SOME INTERSTING OBSERVATIONS:**

- \* A 50 years lady presented with fingating mass left brest confirmed by biopsy as carcinoma had undergone surgery for mass in same breast 7 years ago here. She was clinically diagnosed at that time as Giant Fibroadenoma and Benign nature of lesion was confirmed histologically (which was reported as intracanalicular type of fibroadenoma). spindle cell carcinoma and low grade duct carcinoma insitu pose important diagnostic problem to the pathologist as it mimics benign disease.
- \* 41 Year lady clinically presented like a fibroadenoma with regular mobile mass with the family history of cancer was submitted for excision biopsy which proved exection biosy which provied to be infiltration ductal carcinoma associated with fibrocystic disease she was then treated with simple mastectomy and axillary clearance.

**Inference:**

Any lesion in breast should be viewed with suspicion and malignancy should be excluded.

## CONCLUSION

In this present study, all aspect of BBD excluding inflammatory pathology were analyses the following observation were made.

1. Benign Breast Diseases outnumber carcinoma Breast in this referral hospital in the Ration 1:7:1
2. Out of all Benign Breast Diseases, Fibroadenoma ranks first (54%) increase Incidence was noted in younger population (ie) those below 15 to 20 years Constituted 39% of all cases of Fibroadenoma.
3. For any age group, it's more prevalent in female population than that of males.
4. Benign Breast Diseases are more common from 15 to 30 years with gradual Diminishing incidence with advancing age.
5. Awareness regarding breast diseases is good in general population as 60% reported Within 6 Month irrespective of their educational Status.
6. Incidence of ANDI/FIBROCYSTIC disease is comparable to western series
7. It is Better if all patients are submitted for FNAC and then for appropriate treatment. Excised specimen must be send for histopathological examination to rule out associated carcinoma.

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Breast Echography Brombart - JC  
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## MASTER CHART

S. No	Name	AGE	Sex	OP/IP No	Diagnosis	Quadrant	Side	Size In Cm	Regulatory In Menstrual Cycle	Marital Status	Meno pause
1	Muthu	19	F	40410	Fibroadenosis	Upper Quad	Left	2to5	Regular	Un Married	
2	Edwich Mary	38	F	110015	Fibroadenosis	Upper Quad	R	<2	Regular	Married with child	
3	Selvai	28	F	141009	Fibroadenoma	Upper Quad	B/L	2to5	Regular	Married with child	
4	Baby	25	F	23096	Fibroadenoma	Upper Quad	R	2to5	Regular	Married with child	
5	Dhamayanthi	16	F	155216	Fibroadenoma	Upper Quad	R	2to5	Regular	Unmarried	
6	Vijaya Lakshmi	30	F	159797	Fibroadenosis	Upper Quad	R	2to5	Irregular	Married with child	
7	Irulayee	18	F	159775	Fibroadenoma	Upper Quad	R	<2	Regular	Unmarried	
8	Ramuthai	18	F	231732	Fibroadenoma	Upper Quad	R	2to5	Regular	Unmarried	
9	Selvi	30	F	236470	Fibroadenosis	Upper Quad	L	>5	Regular	Married with child	
10	MalarKodi	20	F	1554	Fibroadenoma	Lower Quad	R	2to5	Regular	Unmarried	
11	Murugan	22	M	135037	Gynaecomastia	Upper Quad	R	2to5	-----	Unmarried	
12	Jaya Lakshmi	18	F	10817	Fibroadenoma	Upper Quad	B/L	2to5	Regular	Unmarried	
13	Kasthuri	32	F	222348	Fibroadenosis	Upper Quad	R	2to5	Regular	Married with child	

14	Poornima	23	F	45126	Fibroadenos is	Upper Quad	R	<2	Irregular	Marri ed with child	
15	Chandra	40	F	48592	Phyllodes Tumour	Upper Quad	R	2to5	Regular	Marri ed with child	
16	MuthuLak shmi	23	F	52431	Fibroadenos is	Upper Quad	L	>5	Regular	Unma rried	
17	Poomayil	30	F	412746	Fibroadeno ma	Upper Quad	R	2to5	Regular	Marri ed witho ut child	
18	Pandiamm al	22	F	43162	Fibroadeno ma	Upper Quad	R	2to5	Regular	Marri ed witho ut child	
19	Mahalaks hmi	22	F	68460	Fibroadeno ma	Upper Quad	R	2to5	Regular	Unma rried	
20	Vasuki	28	F	72259	Fibroadenos is	Lower Quad	R	2to5	Irregular	Marri ed with child	
21	Gethakum ar	28	F	12456	Fibroadeno ma	Upper Quad	B/L	2to5	Regular	Marri ed witho ut child	
22	Devi	35	F	76244	Fibroadenos is	Upper Quad	L	>5	Regular	Marri ed with child	
23	Vasanth	18	M	123707	Gynaecomat ia	Below the Nipple	B/L	<2	-----	Unma rried	
24	Shanthi	25	F	133427	Fibroadeno ma	Upper Quad	R	2to5	Regular	Marri ed with child	
25	Tamil Selvai	26	F	142146	Fibroadeno ma	Upper Quad	R	2to5	Regular	Marri ed witho ut child	
26	Mahalaks hmi	23	F	147315	Fibroadenos is	Upper Quad	L	>5	Regular	Marri ed with	

										child	
27	Astalakshmi	19	F	142457	Fibroadenoma	Upper Quad	R	2to5	Regular	Unmarried	
28	Meenakshi	22	F	149952	Fibroadenoma	Upper Quad	R	2to5	Regular	Unmarried	
29	Lakshmi	55	F	594617	Phyllodes Tumour	All Quad	L	>5	Regular	Married with child	Menopausal
30	Maharani	42	F	120521	Fibroadenosis	Upper Quad	L	2to5	Irregular	Married with child	Perimenopausal
31	Bunchu	28	F	326759	Fibroadenoma	Upper Quad	B/L	2to5	Regular	Married without child	
32	Shanthi	32	F	105628	Fibroadenosis	Lower Quad	R	>5	Regular	Married with child	
33	Jayaraj	14	M	266252	Gynaecomastia	Below the Nipple	R	2to5	-----	Unmarried	
34	Vasanth	35	F	6881	Fibroadenoma	Upper Quad	R	<2	Regular	Married with child	
35	Jeenath Beevi	33	F	00045	Fibroadenosis	Upper Quad	R	>5	Regular	Married without child	
36	Logeeswari	22	F	335124	Fibroadenoma	Upper Quad	R	2to5	Regular	Unmarried	
37	Raja Lakshmi	23	F	15931	Fibroadenosis	Upper Quad	L	2to5	Irregular	Married with child	
38	Vasanth	22	F	31175	Fibroadenoma	Upper Quad	R	2to5	Regular	Married without child	
39	Mariammal	27	F	256447	Lipoma	Lower Quad	R	>5	Regular	Married with child	

40	Aneejan	24	F	152904	Fibroadenosis	All Quad	R	>5	Regular	Married without child	
41	Lakshmi Davi	33	F	603288	Fibroadenosis	Lower Quad	R	2to5	Regular	Married with child	
42	Pandian	19	M	74935	Gynaecomastia	Below the Nipple	B/L	2to5	-----	Unmarried	
43	Rajathi	18	F	962990	Fibroadenoma	Upper Quad	L	2to5	Regular	Unmarried	
44	Shanthi	35	F	165628	Fibroadenosis	Upper Quad	R	<2	Regular	Married with child	
45	Subulakshmi	38	F	146820	Fibroadenoma	Upper Quad	L	2to5	Regular	Married with child	
46	Amina	45	F	10245	Phyllodes Tumour	All Quad	L	>5	Regular	Married with child	menopausal
47	Elammal	21	F	236140	Fibroadenosis	Upper Quad	L	2to5	Irregular	Unmarried	
48	Rajamani	30	F	287178	Fibroadenoma	Lower Quad	B/L	>5	Regular	Married without child	
49	Rani	38	F	932583	Fibroadenosis	Upper Quad	R	2to5	Regular	Married with child	
50	Amutha	27	F	18297	Fibroadenoma	Upper Quad	L	2to5	Regular	Married without child	
51	Parvathi	35	F	1922	Fibroadenosis	Lower Quad	R	>5	Regular	Married with child	
52	KrishnaVanni	20	F	342799	Fibroadenoma	Upper Quad	L	2to5	Regular	Unmarried	

53	Anitha	40	F	45105	Fibroadeno ma	Upper Quad	L	<2	Regular	Marri ed witho ut child	
54	Packia Lakshmi	20	F	376501	Fibroadenos is	Lower Quad	R	2to5	Irregular	Unma rried	
55	Thenmoai	32	F	731307	Fibroadeno ma	Upper Quad	L	>5	Regular	Marri ed witho ut child	
56	Jaya	19	F	15552	Fibroadeno ma	Upper Quad	B/L	2to5	Regular	Marri ed witho ut child	
57	Velli	32	F	45123	Fibroadenos is	Upper Quad	R	>5	Irregular	Marri ed with child	
58	Sumathi	19	F	516254	Fibroadeno ma	Lower Quad	L	2to5	Regular	Unma rried	
59	Kalanchia m	18	F	222480	Fibroadeno ma	Upper Quad	R	<2	Regular	Marri ed witho ut child	
60	Sumathi	20	F	151634	Fibroadeno ma	Upper Quad	L	2to5	Regular	Marri ed witho ut child	
61	Umamake swari	20	F	246339	Fibroadenos is	Upper Quad	R	>5	Regular	Unma rried	
62	Thayamal	16	F	246761	Fibroadeno ma	Lower Quad	R	2to5	Regular	Unma rried	
63	Rajesh	19	M	222477	Gynaecomat ia	Below the Nipple	L	2to5	-----	Unma rried	
64	Meenaku mari	22	F	154212	Fibroadeno ma	Upper Quad	L	2to5	Regular	Unma rried	
65	Famehaw ora	35	F	298028	Fibroadenos is	Upper Quad	R	>5	Regular	Marri ed with child	
66	Kasturi	21	F	222348	Fibroadeno ma	Upper Quad	B/L	<2	Irregular	Marri ed witho ut	

										child	
67	Kayathri	18	F	12456	Fibroadeno ma	Upper Quad	L	2to5	Regular	Unma rried	
68	AnnaMala r	35	F	147653	Fibroadenos is	Upper Quad	R	>5	Regular	Marri ed with child	
69	Chitra	20	F	6392	Fibroadeno ma	Lower Quad	L	2to5	Regular	Unma rried	
70	Palaniam mal	21	F	12456	Fibroadeno ma	Upper Quad	L	2to5	Regular	Marri ed witho ut child	
71	Mydeen Bee	29	F	12533	Fibroadenos is	Upper Quad	L	2to5	Regular	Marri ed with child	
72	Sundarira man	24	F	284512	Fibroadeno ma	Upper Quad	L	2to5	Regular	Marri ed witho ut child	
73	Kuruvam mal	29	F	123216	Fibroadenos is	Upper Quad	R	2to5	Regular	Marri ed with child	
74	Muthupac hi	38	F	124512	Sclerosing Adenosis	Upper Quad	L	>5	Regular	Marri ed with child	
75	Pachi	35	F	435888	Duct Papilloma	Below the Nipple	R	2to5	Regular	Marri ed with child	
76	Roja	19	F	281545	Fibroadeno ma	Upper Quad	L	>5	Regular	Unma rried	
77	Ilamathy	32	F	177731	Fibroadenos is	Upper Quad	R	<2	Regular	Marri ed with child	
78	Alagamal	18	F	464146	Fibroadeno ma	Lower Quad	L	2to5	Regular	Marri ed witho ut child	
79	Madhu	25	F	47856	Galactocele	Below the Nipple	B/L	2to5	Irregular	Marri ed with child	

80	Malika	18	F	317393	Fibroadeno ma	Upper Quad	R	>5	Regular	Unma rried	
81	Meera	27	F	48882	Fibroadenos is	Upper Quad	L	2to5	Regular	Marri ed with child	
82	Rajathi	21	F	1241200	Fibroadeno ma	Upper Quad	L	2to5	Regular	Marri ed witho ut child	
83	Jothilaksh mi	19	F	455662	Fibroadeno ma	Upper Quad	R	2to5	Regular	Marri ed witho ut child	
84	Rathika	16	F	81665	Fibroadenos is	Lower Quad	R	2to5	Regular	Unma rried	
85	Ravathi	37	F	133427	Fibroadenos is	All Quad	R	<5	Regular	Marri ed with child	
86	Sudha	23	F	167455	Fibroadeno ma	Upper Quad	L	>2	Regular	Unma rried	
87	Arasi	15	F	352123	Fibroadeno ma	Upper Quad	R	2to5	Regular	Marri ed witho ut child	
88	Amsavalli	32	F	41496	Fibroadenos is	Lower Quad	R	2to5	Irregular	Marri ed with child	
89	Naga Jothi	23	F	79287	Fibroadeno ma	Upper Quad	L	<2	Regular	Unma rried	
90	Kamala	52	F	339645	Fibroadenos is	All Quad	R	2to5	Regular	Marri ed with child	Meno pausal
91	Mahalaks hmi	20	F	620596	Fibroadeno ma	Lower Quad	R	2to5	Regular	Unma rried	
92	Manimak alai	19	F	76561	Fibroadeno ma	Upper Quad	R	>5	Regular	Marri ed witho ut child	
93	Kalyani	20	F	222480	Fibroadeno ma	Lower Quad	L	2to5	Regular	Unma rried	

**STUDY OF BENIGN BREAST LUMPS (NON INFLAMMATORY) GRH**

DIGN

NAME: AGE: SEX: WARD: UNIT:

EDUCATION:

OCCUPATION:

DOA: OP/IP NO.

DOS: DOD:

1. H/O PRESENT ILLNESS

A.C/O

1) MASS:

2) PAIN:

3) DISCHARGE:

B. DURATION OF C/O

C. RELATION TO MENSTRUATION

II. PASS H/O

1) SIMILAR C/O

DURGS (DIGOXIN, DIURETICS HORMONES)

3) OTHER MEDICAL DISORDERS (LEPROSY, THYROID)



III. PERSONAL H/O

1. MENSTRUAL H/O
  - i) AGE AT MENARCHE
  - ii) CYCLE
  - iii) MENOPAUSE
2. MARITAL STATUS
  - i) AGE AT MARRAGE
  - ii) PARITY
  - iii) SPACING
  - iv) LCB
  - v) BREAST FEEDING
3. DIET
4. ADDICTION (SMOKING / ALCOHOLISM)

IV. FAMILY H/O

V. GENERAL EXAMINATION

- VI. LOCAL EXAMINATION LUMP: SITE: SIZE: /NO  
NIPPLE:  
SKIN CHANGES:

VII. FNAC

VIII. TRT: MEDICAL  
SURGICAL

IX. BIOPSY REPORT

X. FOLLOW UP: